

REMARKS

The non-final Office Action dated June 19, 2003 and references cited therein have been reviewed. The Examiner indicated that the Preliminary Amendment filed May 28, 2002 only included claims 40-70. As a result, the Examiner renumbered new claims 78-91 submitted in the March 20, 2003 Amendment to claims 71-84. The discrepancy in the claim numbering appears to be the result of the Examiner being unable to locate page 7 of the Preliminary Amendment filed May 28, 2002. Page 7 included claims 71-77. In an effort to resolve any further confusion, Applicant has canceled claims 29-33, 35-38, 40-49, 51, 53-56 and 58-84 without prejudice, and added new claims 85-151. Claims 85-151 are now the only claims pending in the above-identified patent application.

THE SECTION 103 REJECTION

Claims 29-33, 37-43, 46-48, 53-56, 58-60, 62, 63, 67, 68 and 70-82 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bergman in view of Fienberg. Applicant has canceled these claims, thereby making the rejection moot. Applicant submits that new claims 85-151 are patentably distinct over the cited art of record.

The Examiner asserted that Bergman teaches the invention except for the specific structure of pole piece/air gap. The specific structure of pole piece/air gap for a choke used in a D.C. arc welder is the principal inventive feature of Applicants' invention.

The Examiner cited the teaching of Feinberg to be combined with Bergman to assert that the invention defined in the pending claims is obvious in view of such teachings. As an initial matter, the Examiner has not indicated any specific section in either Feinberg or Bergman which would motivate one skilled in the art to combine any teachings of Feinberg with Bergman. Indeed, the device disclosed in Feinberg is a transformer, not a choke. As the Examiner is aware, a transformer

and choke operate very differently. A rejection under Section 103 requires teachings in a reference to motivate one skilled in the art to combine the teachings. The teachings relating to a transformer of Feinberg would not motivate one skilled in the art to in any way modify the choke disclosed in Bergman. Indeed, Applicant submits that Feinberg is non-analogous to the choke defined in the present invention, thus cannot be properly combined with Bergman to support a rejection under Section 103.

Irrespective of the lack of motivation problems and non-analogous problems associated with Feinberg, Feinberg does not disclose, teach or suggest the novel gap configuration for a choke that is defined in the pending claims. Feinberg discloses the assembly of a transform having at least one thin air gap. The transformer has a core formed of a frame-like shell 11 and a central winding leg 12 having coils 13 and 14. The central leg includes a notch 31, 32 having the same size as notches 21, 22 in extensions 19, 20 of shell 11. The notches are used to form an opening to accept a pin. When the pin is inserted in the notches, thin air gaps 40 and 41 are formed between extensions 19, 20 and the central winding leg. The notches are used merely as locator points for the pin. The notches in now way function to affect the saturation curve of the transformer. As a result, Feinberg does not disclose, teach or suggest, the novel air gap configuration of the present invention for use with a choke or the advantages for using such a novel configuration for an air gap.

Applicants submit the claims presently pending in the above-identified patent application are in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,
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